

SD-97558-01-A

BD 1	DEDICATED SERVICE
BD 2	NONDEDICATED SERVICE
BD 3	NIGHT TEST COVERAGE DAY & NIGHT OFFICES DEDICATED
BD 4	NIGHT TEST COVERAGE DAY & NIGHT OFFICES NONDEDICATED
BD 5	NIGHT TEST COVERAGE DAY OFFICE DEDICATED & NIGHT OFFICE NONDEDICATED

SHEET INDEX NOTES

1. WHEN CHANGES ARE MADE IN THIS DRAWING, ONLY THOSE SHEETS AFFECTED WILL BE REISSUED.
2. THIS SHEET INDEX WILL BE REISSUED AND BROUGHT UP TO DATE EACH TIME ANY SHEET OF THE DRAWING IS REISSUED, OR A NEW SHEET IS ADDED.
3. THE ISSUE NUMBER ASSIGNED TO A CHANGED OR NEW SHEET WILL BE THE SAME ISSUE NUMBER AS THAT OF THE SHEET INDEX.
4. SHEETS THAT ARE NOT CHANGED WILL RETAIN THEIR EXISTING ISSUE NUMBER.
5. THE LAST ISSUE NUMBER OF THE SHEET INDEX IS RECOGNIZED AS THE LATEST ISSUE-NUMBER OF THE DRAWING AS A WHOLE.

SUPPORTING INFORMATION

EQUIPMENT REGISTRATION	
CATEGORY	NO.
EQUIPMENT DWG	J93016DB

NOTICE-NOT FOR USE OR DISCLOSURE OUTSIDE THE BELL SYSTEM EXCEPT UNDER WRITTEN AGREEMENT.

SD-97558 - O

INFO

COMMON SYSTEMS
FAR-END TEST TRUNK FOR INCOMING
REMOTE TESTING FROM LTD

AT&TCO
STANDARD

SD-97558-01-A1
12 SHEETS

BELL TELEPHONE LABORATORIES
INCORPORATED

APPARATUS INDEX

EQUIP LOC	APP FIG.	
	NO.	SH NO.
CIRCUIT PACKS		
DESIG		
TMR	I	C1

DESIG	LOCATION		
	FS	APP FIG.	EQUIP
CAPACITORS			
C1	IC5	I	
C2	IC8	I	
C3	IA6	I	
C4	IA6	I	
C5	IA3	I	
C6	IB3	I	

DESIG	LOCATION		
	FS	APP FIG.	EQUIP
RESISTORS			
R2	IE3	I	
R3	IE3	I	
R4	IA6	I	
R5	IA6	I	

DESIG	LOCATION		
	FS	APP FIG.	EQUIP
RELAYS			
ANS	IC4	I	
BY	IG7	I	
BT	IB4	I	
CT	IE7	I	
CT1	IF7	I	
CTF	IF2	I	
DTS	IE4	I	
DTSI	IE6	I	
NC	IB7	I	
OH	IB4	I	
S	IC2	I	
SI	IE2	I	
ST	IF4	I	
TMI	IB7	I	

DIODES			
D1	IE8	I	
D2S	IF4	I	
D2SI	IE6	I	

THERMISTORS			
DIS	IF5	I	
DISI	IE6	I	
OH	IB5	I	

VARISTORS			
V1	IE2	2	
V2	IE2	2	

OPTION INDEX

APP OR WRG	LOCATION
Y	APP FIG. I
X	APP FIG. I, IB2
W	APP FIG. I
V	APP FIG. I
T	IB2
S	IB8
R	IB4
Q	IB6, IC9, IB8
N	IC8, IB1, IB8
M	IB8, IC9, IB1, IB8
K	IF1
J	IF1

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FAR-ENO TEST TRUNK

BELL TELEPHONE LABORATORIES

2

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65

2AR

FS I INCOMING TEST TRUNK

TO MSC CKT FOR MSC INT
FR (PANEL), INT FR CBR IL
INT CKT 60 OR 120 ZPM
(CSBR 5)

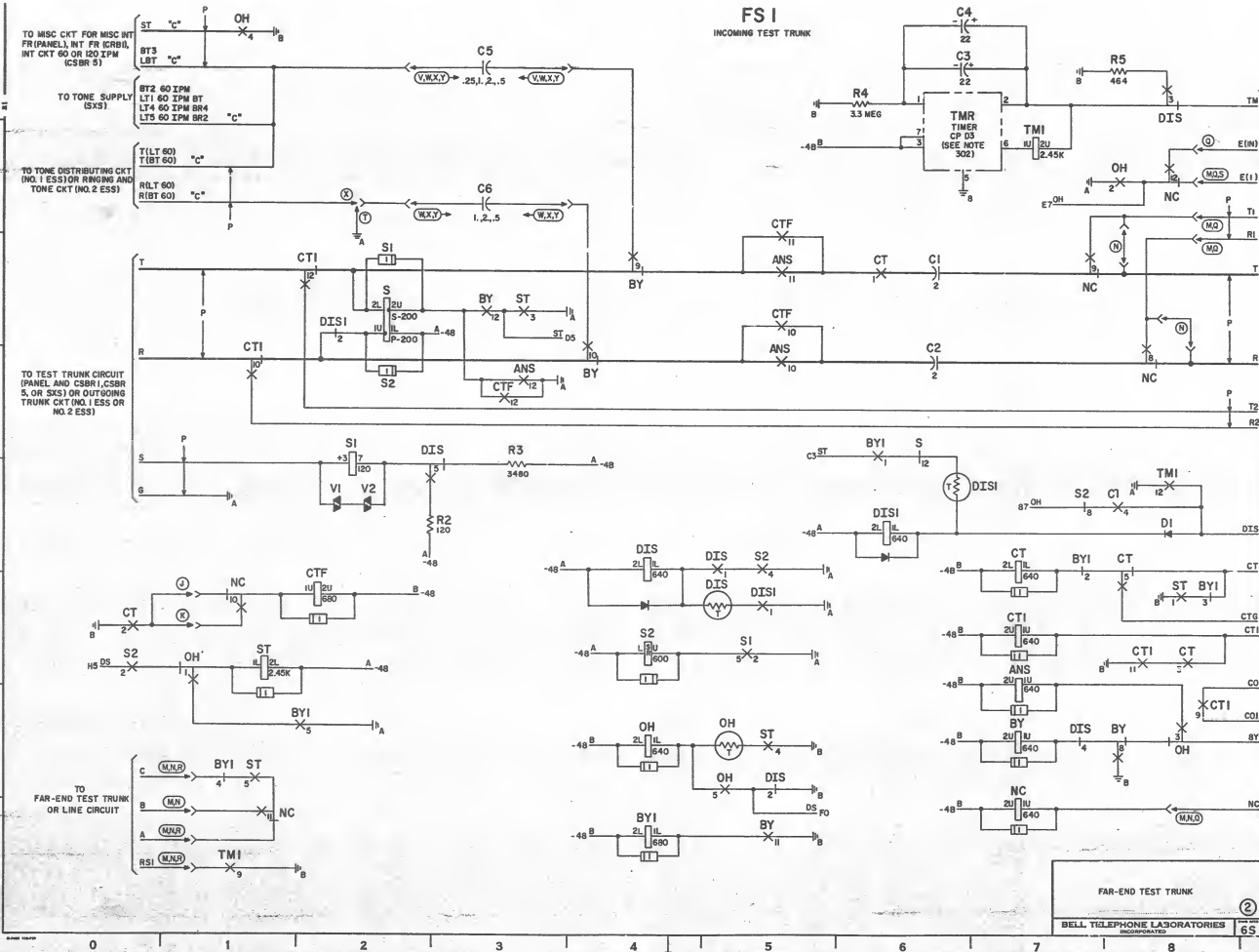
TO TONE SUPPLY
(SX5)

TO TONE DISTRIBUTING CKT
(NO. 1 ESS) OR RINGING AND
TONE CKT (NO. 2 ESS)

TO TEST TRUNK CIRCUIT
(PANEL AND CSBR 1, CSBR
5, OR 325) OR OUTGOING
TRUNK CKT (NO. 1 ESS OR
NO. 2 ESS)

TO
FAR-END TEST TRUNK
OR LINE CIRCUIT

TO
REMOTE TESTING CIRCUIT
FAR-END
(SEE NOTE 401)



APP FIG. 1

[illegible]

<u>DESIG</u>	<u>LOC</u>	<u>COO</u>
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DESIG

C2	ID6	439A
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DIODES

DI	IE8	446F
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NETWORKS

100

[illegible][illegible]

—APP FIG. 2

RESISTORS

R2 IE3 I8D

THERMISTORS

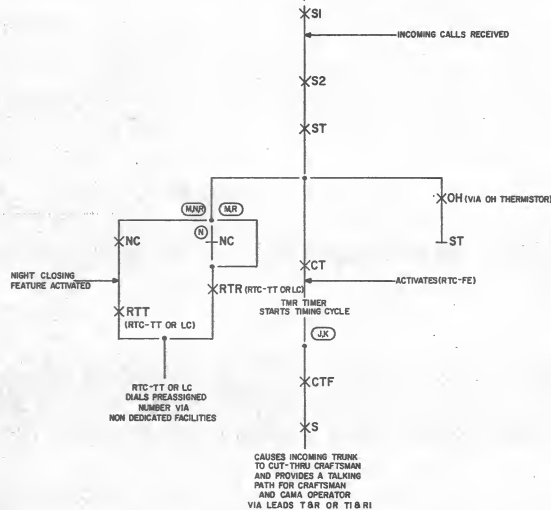
DIS IFS 1

RELAY5 0 IF5 SI 328A

DESIGN

Y2	IE2	100A
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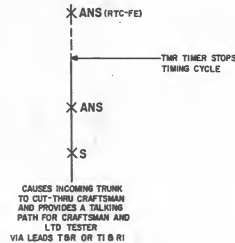
SCI INCOMING SEIZURE CRAFTSMAN DIAL NUMBER TO SEIZE FAR-END TEST TRUNK FOR INCOMING REMOTE TESTING



RTC-FE = REMOTE TESTING CIRCUIT, FAR-END
RTC-TT OR LC = REMOTE TESTING CIRCUIT, TEST TRUNK OR LINE CIRCUIT

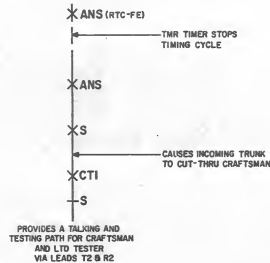
SC2 INCOMING CALL COMPLETION (MODE A)

CALL ANSWERED BY
TESTER AT LTD AND T KEY IS OPERATED



SC3 INCOMING CALL COMPLETION (MODE B)

CALL ANSWERED BY TESTER AT LTD
AND CT, T AND ROCE KEYS ARE OPERATED



FAR-END TEST TRUNK

BELL TELEPHONE LABORATORIES

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2

6S

AE

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ISSUE
ZAR

SC4

TESTING INCOMING LINE (MODE A)

LTD TESTER OPERATES
CT KEY

X CTI

S

TRANSFER T3 R OR T1 B RI
OF INCOMING LINE TO
LEADS T2 B R2

SC5

TESTING ALTERNATE INCOMING LINE (MODE A)

LTD TESTER OPERATES
AND RELEASES CT KEY

X CTI

X CTR (RTC-FE)

CT

CTI

X S

CRAFTSMAN PUT ON HOLD

SC6

INCOMING CALL NOT ANSWERED

CRAFTSMAN HANGS UP BEFORE TMR TIMER
TIMES OUT (~100 SEC)

S

INCOMING TEST TRUNK
REMOVES GROUND FROM SLEEVE LEAD

SI

S2

LEAD DIS GROUNDED
TO INITIATE DISCONNECT IN RTC-FE

X DISI

X DIS (VIA DIS THERMISTOR)

OH

TMR TIMER
RESET

RTC-FE FINISHES
DISCONNECT CYCLE

CT

DISI

(AX)

DIS

CTF

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FAR-END TEST TRUNK

2

BELL TELEPHONE LABORATORIES

6S

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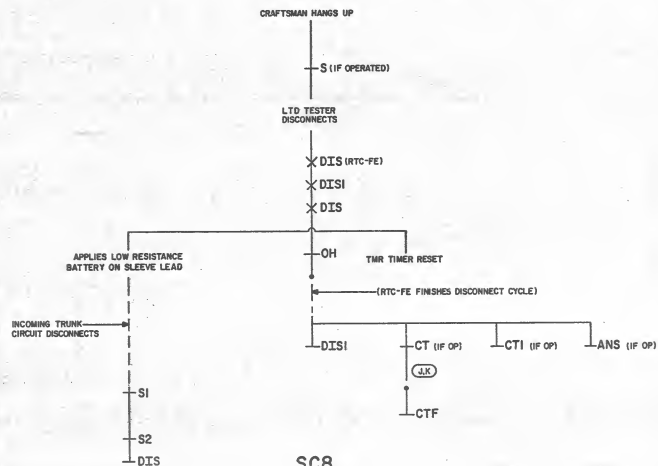
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2AR

A B C D E F G H J K L M N P Q R S T U V W X Y Z AA AB AC AD AE

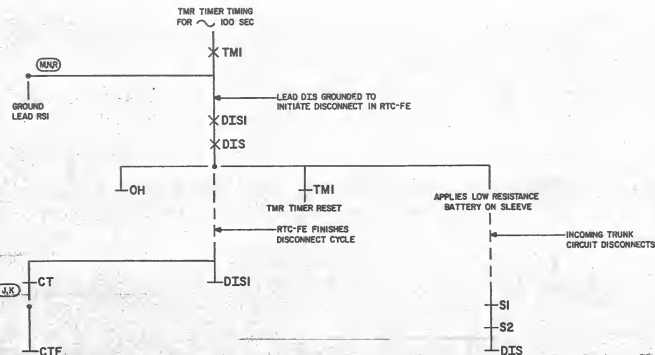
SC7

DISCONNECT BY LTD TESTER



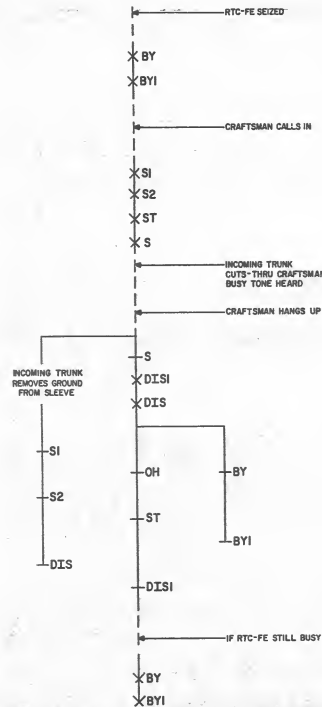
SC8

TIMED DISCONNECT



SC9

CIRCUIT CALLED WHILE RTC-FE IS BUSY



SD-97558-01-E3

RAB-TEST TRUNK		②	SD-97558-01-E3
BELL TELEPHONE LABORATORIES		6S	

A B C D E F G H J K L M N P Q R S T U V W X Y Z AA AB AC AD AE

CIRCUIT REQUIREMENTS																
APPARATUS				MECH. REQ.		CIRCUIT PREPARATION				DIRECT CURRENT FLOW REQ.			REMARKS			
DESIG.	CODE	OPT.	FLG.	BSP. FUL.	CONT. PRES.	ABSL. TOL.	BLOCK OR INSULATE	TEST CLIP DATA	TEST SET PRES.	SEE TEST NOTE	TEST WDG.	TEST FOR		TEST WDG. NA	TEST HEAD NA	
RELAYS								COHM-INT.	COHM-GRD.							
ANS	U2AK4	I		202			1IN(ANS)	IU(ANS)				0	12	IL3	MTD WITH (IXS1)	
BY	U2AK30	I		202			4B(DXS)	4B(BX)	GRD			0	23	22	MOUNT'ED WITH (DXS)	
BVI	U2AK41	I		202			IL(BYI)	IL(BYI)	GRD			0	31.5	30	MOUNTED WITH (D)	
												R	48	4.4	4.2	
CT	U2AK22	I		216			2B(BVI)	IL(CT)	GRD			0	22.5	22	MOUNT'D WITH (CTI)	
CTI	U2AK22	I		216			3M(CT)	1U(CTI)	GRD			0	22.5	22	MOUNTED WITH (CT)	
CTP	U2AK41	I		202			1IM(CTP)	IU(CTP)	GRD			0	31.5	30	MTD WITH (BYI)	
												R	48	4.4	4.2	
DXS	U2AK30	I		202				IL(DXS)	GRD			0	23	22	MOUNTED WITH (BY)	
DXS1	U2AK4	I		202			1M(DXS1)	IL(DXS1)	GRD			0	12	IL3	MTD WITH(ANS)	
NC	U2AK22	I		216				IU(NC)	GRD			0	22.5	22	MOUNTED WITH (OH)	
OH	U2AK22	I		216			2007S/18 (NC)	IL(OH)	GRD			0	22.5	22	MOUNTED WITH (NC)	
S	AJH2	I		75			22ACT1,008CT1,008NO,10Y10,10T20	2L(S)	IU(S)	N	1,2,4	P/S	0	14.7	14	
												R	5.8	5.1		
SI	328A	I					(S2)W0	7(S)	+3(S)	0/6		0	16.5	5.5		
												NO	3			
												R	1.5			
S2	A615	I		221			2M(S2)	U(S2)	GRD			0	18.5	17.5		
												H	2.5	2.3		
												R	3	2		
ST	U2AK4	I		202			628CT1,SH10Y10,008D,118(NC)	IL(ST)	GRD			0	12	IL3	MOUNTED WITH (IM)	
TM1	U2AK4	I		202			3M(DXS)	IU(TM1)	U(TM1)	0/6	S	0	12	0.3	MOUNTED WITH (ST)	

[illegible]

- NOTES:
1. CONTACT MAKE 5, NO MAKE 8.5, READJUST; MAKE 3.5, NO MAKE 10, TEST.
2. ARMATURE BACK TENSION MINIMUM 20 GRAM READJUST, 15 GRAM, TEST.
3. REMOVE TIMER(TMR) CP-03 BEFORE MAKING TEST.
4. CONTACT BREAK 13 READJUST, 11.5 TEST, NO BREAK 16.5, READJUST, 18 TEST.
5. APPLY -48V BATTERY TO 2W1(M) AND OBSERVE THAT RELAY (T/M) OPERATES IN 85-115 SECONDS, USING A STOP-WATCH, SWEEP SECOND HAND WATCH OR EQUIVALENT.

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ISSUE
2AR

FAR-END TEST TRUNK

②

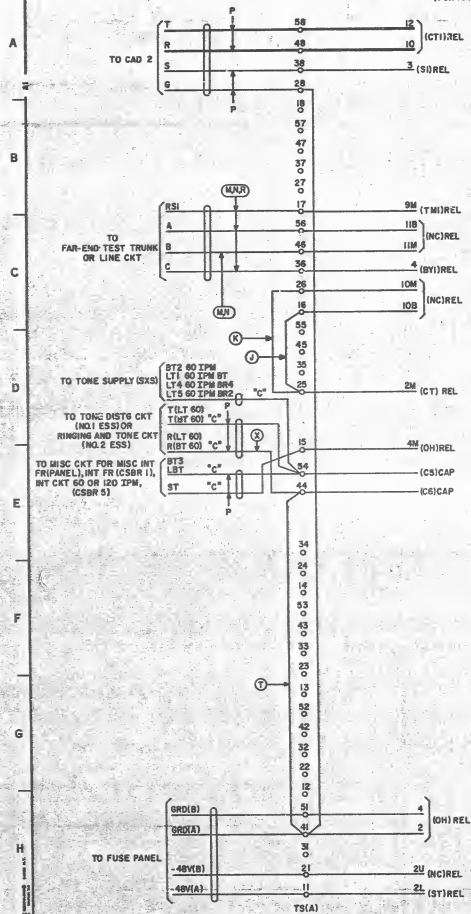
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BELL TELEPHONE LABORATORIES

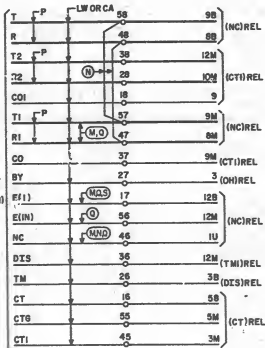
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FIGURE 10.10

CAD 1-
(FOR APP FIG.1)

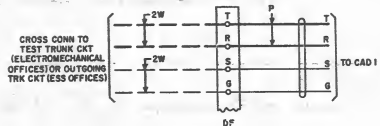


TO
REMOTE TEST
CKT FAR-END
(SEE NOTE 401)



TS(B)

CAD 2
DISTG FRAME LEADS TO TEST TRUNK
CKT OR OUTGOING TRUNK CKT



FAR-END TEST TRUNK

BELL TELEPHONE LABORATORIES

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②

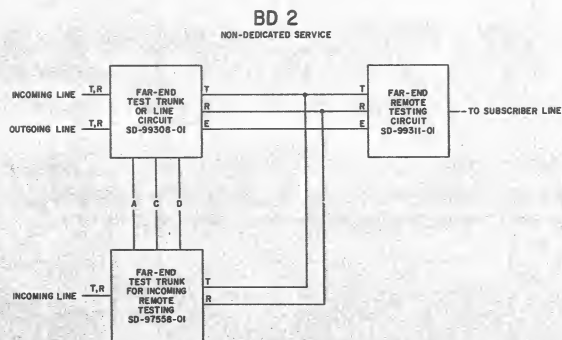
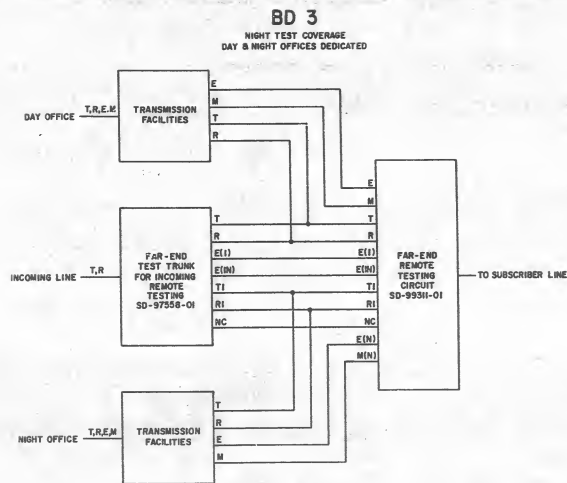
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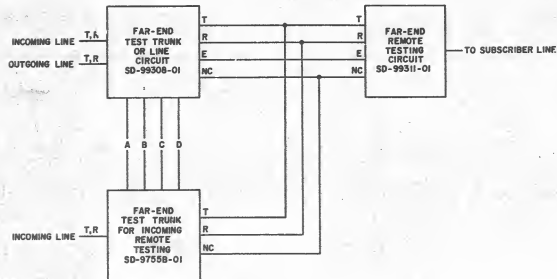
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100



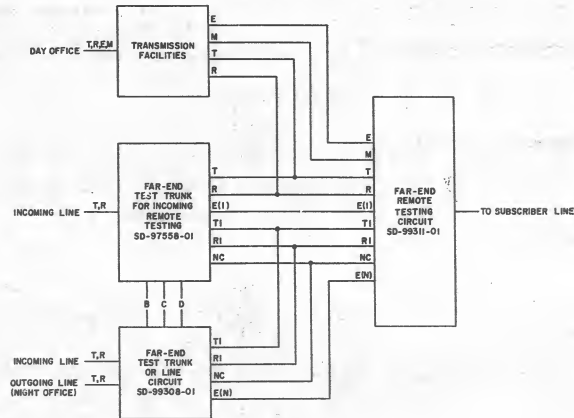
BD 4

NIGHT TEST COVERAGE
DAY & NIGHT OFFICES NON-DEDICATED



BD-5

NIGHT TEST COVERAGE
DAY OFFICE DEDICATED &
NIGHT OFFICE NON-DEDICATED



SD-97558-01-H2